



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,159	10/11/2001	Glen Alan Jaquette	TUC920010022US1	3879
46917	7590	11/08/2005	EXAMINER	
KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			BACKER, FIRMIN	
			ART UNIT	PAPER NUMBER
			3621	

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/977,159 FIRMN BACKER	JAQUETTE, GLEN ALAN Art Unit 3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 September 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-43 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-43 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12th, 2005 has been entered.

Amendment

2. An amendment was filed alone with the RCE
3. Claims 1, 18 and 27 have been amended
4. No claim has been added
5. No claim has been canceled
6. Claims 1-43 remains pending in the application

Response to Arguments

7. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuroda et al (US 6,023,506).

10. As per claim 1, 10, 18 and 27, Kuroda et al teach a method for enabling access to data in a storage medium within one of a plurality of storage cartridges capable of being mounted into a interface device, comprising providing an association of at least one coding key to a plurality of storage cartridges; and encrypting the coding key, wherein the coding key is decrypted to use to decode and code data stored in the storage medium of at least one of the storage cartridge (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

11. As per claim 2, 19 and 28, Kuroda et al teach a method of using the coding key to encode data to write to the storage medium; transmitting the encoded data to the interface device to write to the storage medium in one storage cartridge mounted in the interface device; receiving encoded data from the interface device read from the storage medium; and using the

coding key to decrypt the received encoded data (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

12. As per claim 3, 20, 29, Kuroda et al teach a method wherein the association of the at least one coding key to the plurality of storage cartridges associates one key with the plurality of storage cartridges, wherein the one key is capable of being used to encode data written to the storage medium and decode data read from the storage medium of the plurality of storage devices (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

13. As per claim 4, 21, 30, Kuroda et al teach a method wherein the association of the at least one coding key to the plurality of storage cartridges associates a different key with each storage cartridge, wherein the key associated with one storage cartridge is used to encode data written to the storage medium and decode data read from the storage medium of the storage cartridge (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

14. As per claim 5, 22, 31, Kuroda et al teach a method wherein the coding key comprises a seed value that is used to generate an additional key that is used to directly decode and encode the data in the storage medium in the storage cartridge (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

15. As per claim 6, 32, Kuroda et al teach a method further comprising: transmitting the encrypted coding key to the interface device, wherein the interface device decrypts the coding

Art Unit: 3621

key to use to decode and code data stored in the storage medium (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

16. As per claim 7, 33, Kuroda et al teach a method wherein encrypting the coding key further comprises: encrypting the coding key with a first key, wherein a second key used by the interface device is capable of decrypting the coding key encrypted with the first key (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

17. As per claim 8, 34, Kuroda et al teach a method wherein encrypting the coding key further comprises: encrypting the coding key with a first key, wherein a second key is capable of decrypting the coding key encrypted with the first key; encrypting the second key with a third key, wherein a fourth key used by the interface device is capable of decrypting data encrypted with the third key; and transmitting the coding key encrypted with the first key and the second key encrypted with the third key to the interface device (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

18. As per claim 9, 35, Kuroda et al teach a method wherein encrypting the coding key further comprises: encrypting the coding key with a first key, wherein a second key is capable of decrypting the coding key encrypted with the first key; transmitting the coding key encrypted with the first key to the interface device; receiving, from the interface device, the coding key encrypted with the first key; decrypting the coding key with the second key; encrypting the coding key with a third key, wherein a fourth key used by the interface device is capable of

Art Unit: 3621

decrypting data encrypted with the third key; and transmitting the coding key encrypted with the third key to the interface device (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

19. As per claim 10, 23 and 36, Kuroda et al teach a method for accessing data in a removable storage cartridge including a storage medium, comprising: receiving an encrypted coding key from a host system; decrypting the encrypted coding key; using the coding key to encode data to write to the storage medium; and using the coding key to decode data written to the storage (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

20. As per claim 11, 37, Kuroda et al teach a method wherein encoding the data with the coding key compresses the data and wherein decoding the data written to the storage medium decompresses the data, and wherein the data can only be encoded or decoded using the coding key (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

21. As per claim 12, 24, 38, Kuroda et al teach a method wherein the coding key is encrypted by a first key maintained at the host system, further comprising; maintaining a second key that is capable of decrypting data encrypted using the first key, wherein the second key is used to decrypt the coding key encrypted with the first key (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

Art Unit: 3621

22. As per claim 13, 39, Kuroda et al teach a method wherein the second key is stored in an integrated circuit non-volatile memory that is only accessible to decrypting logic that uses the second key to decrypt data encrypted using the first key (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

23. As per claim 14, 25, 40, Kuroda et al teach a method further comprising transmitting the coding key decrypted using the decrypting logic to encoder/decoder logic, wherein the encoder/decoder logic uses the coding key to encode and decode data to the storage medium (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

24. As per claim 15, 26, 41, Kuroda et al teach a method comprising: storing the coding key encrypted with the first key within the storage cartridge; receiving an input/output (I/O) request directed to the storage cartridge; and accessing the encrypted coding key from the storage cartridge, wherein the accessed coding key is decrypted using the second key, and wherein the decrypted coding key is used to encode and decode data to execute the I/O request to the storage cartridge (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

25. As per claim 16, 42, Kuroda et al teach a method wherein the received encrypted coding key is encrypted by a first key maintained at the host system, wherein the host system maintains a second key that is capable of decrypting data encrypted using the first key, further comprising: receiving, from the host system, the second key encrypted by the host system using a third key, wherein data encrypted using the third key is capable of being decrypted using a fourth key;

Art Unit: 3621

accessing the fourth key; using the fourth key to decrypt the encrypted second key received from the host system; and using the decrypted second key to decrypt the received coding key encrypted using the first key (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

26. As per claim 17 and 43, Kuroda et al teach a method wherein the coding key is encrypted by a first key maintained at the host system, wherein the host system maintains a second key that is capable of decrypting data encrypted using the first key, further comprising: transmitting the encrypted coding key received from the host system back to the host system; and in response to transmitting the encrypted coding key back to the host system, receiving, from the host system, the coding key encrypted using a third key, wherein data encrypted using the third key is decrypted using a fourth key; and accessing the fourth key, wherein the coding key is decrypted using the fourth key (*see figs 1, 2, 11, 13, 16, 22, 23, 25 and their accompanied text in the disclosure*).

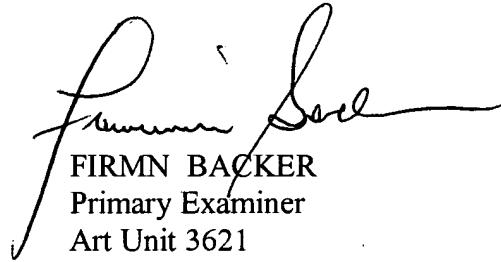
Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (*see form 892*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FIRMN BACKER whose telephone number is 571-272-6703. The examiner can normally be reached on Monday - Thursday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FIRMN BACKER
Primary Examiner
Art Unit 3621

October 26, 2005